

CLAIMS

Sub 27

1. An installation for the circulation of part-carrying pallets (12), comprising a support frame (12) for supporting modules (14) for circulation of the pallets,

characterised in that the support frame (10) comprises at least one vertical frame arrangement (16) formed by a rigid mecano-welded structure from standard profile members (20, 22, 24, 26), as well as boxes (18) each formed by a mecano-welded structure from standard profile members (42, 46, 48) and capable of being removably fixed on respective sides of the vertical frame arrangement (16), and that each of the boxes (18) comprises an upper surfaced portion (44) capable of receiving at least one module (14) and a lower portion (40) provided with adjustable feet (50) for adjusting the horizontality of the upper surfaced portion.

2. An installation as set forth in claim 1 characterised in that the standard profile members (20, 22, 24, 26) of the vertical frame arrangement (16) and the standard profile members (42, 46, 48) of the boxes (18) are commercially available profile members of steel of type NIP.

3. An installation as set forth in claim 1 characterised in that the vertical frame arrangement (16) comprises a lower horizontal profile member (20), an upper horizontal profile member (22), an intermediate horizontal profile member (24) and two vertical profile members (26) connected to the respective ends of the horizontal profile members (20, 22, 24).

4. An installation as set forth in claim 2 characterised in that the lower horizontal profile member (20) extends substantially at the level of the lower portion (40) of the boxes without however resting on the ground, that the intermediate horizontal profile member (24) extends substantially at the level of the upper surfaced portion (44) of the boxes, and that the

upper profile member (22) extends at a spacing with respect to the level of the upper surfaced portion (44) of the boxes.

5. An installation as set forth in one of claims 3 and 4 characterised in that the vertical frame arrangement (16) is provided on each side with six fixing plates (28, 28, 30, 30, 32, 32) which comprise four box fixing plates (28, 28, 30, 30) capable of being removably fixed to four homologous fixing plates (54) forming part of a box (18) and two frame arrangement fixing plates (32) capable of being removably fixed on an adjacent vertical frame arrangement.

6. An installation as set forth in claim 5 characterised in that the six fixing plates (28, 28, 30, 30, 32, 32) disposed on one side of the frame arrangement (16) extend horizontally and comprise two lower plates (28) fixed at the level of the lower profile member (20) of the frame arrangement, two intermediate plates (30) fixed at the level of the intermediate profile member (24) and two upper plates (32) fixed at the level of the upper profile member (22) of the frame arrangement.

7. An installation as set forth in one of claims 5 and 6 characterised in that the six fixing plates (28, 28, 30, 30, 32, 32) are co-planar and welded to the vertical frame arrangement (16) and comprise three plates (28, 30, 32) which extend beyond one of the two vertical profile members (26) and three plates (28, 30, 32) which extend beyond the other vertical profile member (26).

8. An installation as set forth in one of claims 5 through 7 characterised in that the box fixing plates (28, 28, 30, 30) forming part of the frame arrangement (16) are capable of being fixed respectively against the four homologous plates (54) of a box by way of fixing means of the screw type and with the interposition of spacer plates (57).

9. An installation as set forth in one of claims 5 through 8 characterised in that the fixing plates (54) of the box (18) are co-planar and welded to the box.

10. An installation as set forth in one of claims 1 through 9 characterised in that the box (18) comprises four profile members (42) forming the lower portion (40) and supporting the adjustable feet (50), four profile members (46) forming the upper surfaced portion (44) and four vertical profile members (48) connecting the lower portion (40) and the upper surfaced portion (44).

11. A process for assembling an installation as set forth in one of the preceding claims, comprising the following operations:

- a) assembling the frame arrangement (16) on the ground;
- b) placing the frame arrangement vertically and holding it vertically;
- c) presenting the boxes (18) on respective sides of the vertical frame arrangement (16) and fixing them thereto;
- d) repeating if necessary foregoing operations a) through c) for other frame arrangements and boxes to form the support frame (10) of the installation;
- e) assembling items of equipment or accessories (60, 62) to the support frame formed in that way; and
- f) regulating the level by acting on the adjustable feet (50) of the boxes (18).

12. A process as set forth in claim 11 characterised in that it comprises the following supplementary operation:

- g) fixing the modules (14) on the upper surfaced portions (44) of the boxes (18).